

**A. 200**

**UNITED STATES BANKRUPTCY COURT  
SOUTHERN DISTRICT OF NEW YORK**

In re:

LEHMAN BROTHERS HOLDINGS INC., *et al.*,

Debtors.

Chapter 11

Case No. 08-013555

(Jointly Administered)

**Expert Report of**

**Joseph Schwaba**

**March 15, 2010**

## Table of Contents

I.	Introduction.....	1
II.	Summary of Qualifications.....	1
III.	Summary of Opinions.....	2
IV.	Opinion and Bases Thereof.....	3
	Opinion 1: Barclays' Exit Value Marks Are Incorrect and Represent A Lack of Proper Analysis and Calculation.....	3
	A. Composition of the Municipal Portfolio and Barclays' Exit Value.....	3
	B. Independent Valuation Of Municipal Portfolio.....	4
	Opinion 2: Professor Pfleiderer was Incorrect in Accepting Barclays' Exit Price Marks.....	6

## **LIST OF EXHIBITS AND APPENDICES**

**Exhibit I:** **List of CUSIPs valued**

**Exhibit II:** **Valuation Results**

**Appendix I:** **Curriculum Vitae**

**Appendix II:** **List of Documents Relied Upon**

**Appendix III:** **Methodology**

## I. INTRODUCTION

1. This report is submitted by Joseph Schwaba. I am an independent consultant working with Navigant Economics (Chicago Partners), a subsidiary of Navigant Consulting, Inc., which specializes in the application of accounting, economics, and finance to business consulting, legal, and regulatory issues.
2. I have been asked by counsel for the Movants to undertake a valuation of certain of the municipal securities Barclays' acquired as part of the Sale Transaction.<sup>1</sup> Relatedly, I also reviewed the methodologies, procedures, and data Barclays used to value these same municipal securities and reviewed Barclays' expert Professor Paul Pfleiderer's report, dated January 8, 2010 (hereafter the "Pfleiderer Report"), which approves Barclays' methodologies, procedures, and data.

## II. SUMMARY OF QUALIFICATIONS

3. My main area of expertise is in fixed income capital markets, including expertise in municipal bonds.
4. Before beginning my career in banking and fixed income capital markets, I graduated from the University of Notre Dame in 1967 with a degree in Economics. After serving as an officer in the US Marine Corps, I received an MBA in Finance from the Kellogg Graduate School of Management at Northwestern University in Evanston, Illinois.

---

<sup>1</sup> I submit this report on behalf of (a) Lehman Brothers Holdings, Inc. (the "Debtor" or "LBHI"; (b) James W. Giddens, as Trustee for the Securities Investor Protection Act Liquidation of Lehman Brothers Inc. (the "Trustee"); and (c) the Official Committee of Unsecured Creditors of Lehman Brothers Holdings, Inc. and its affiliated debtors and debtors in possession (the "Creditors' Committee," together with LBHI and the Trustee, the "Movants") in connection with Movants' motions filed under Federal Rule of Civil Procedure 60(b) (the "Rule 60(b) Motions"). In the Rule 60(b) Motions, Movants' seek relief from the Order Under 11 U.S.C. §§ 105(a), 363, and 365 and Federal Rules of Bankruptcy Procedure 2002, 6004 and 6006 Authorizing and Approving (A) the Sale of Purchased Assets Free and Clear of Liens and Other Interests and (B) Assumption and Assignment of Executory Contracts and Unexpired Leases, dated September 20, 2008 (the "Sale Order"). In the Sale Order, the Court approved the sale (the "Sale Transaction") of certain assets of LBHI, LB 745 LLC, and Lehman Brothers Inc. ("LBI," and together with LB 745 LLC and LBHI, the "Sellers," and together with LBHI's various other foreign and domestic affiliates, "Lehman") to Barclays Capital Inc. ("Barclays") in accordance with the terms set forth in an Asset Purchase Agreement, dated as of September 16, 2008 ("Asset Purchase Agreement") and related agreements, modifications and purported "clarification[s]" thereof.

5. After managing profitable businesses in the fixed income and derivative markets at firms such as AG Becker (since merged into Merrill Lynch), Prudential-Bache Securities (now Prudential Financial), and Continental Bank (since acquired by Bank of America), I started my own institutional advisory business which focused on market-based risk management in the fixed income capital markets, which included managing a wide range of projects related to fixed income and derivative products, as well as providing some expert testimony. Most recently I was a Director of Corporate Risk Management at the Federal Home Loan Bank – Pittsburgh.

6. Chicago Partners charges an hourly rate of \$580 for my time. Other Chicago Partners professionals, working under my direction and supervision, assisted in my analyses and Chicago Partners was or will be compensated for their work at their customary hourly rates. Our compensation is not contingent in any way upon the outcome of this matter.

7. My experience is described in more detail in my curriculum vitae, which is attached as Appendix I.

### **III. SUMMARY OF OPINIONS**

8. My analysis of Barclays' valuation of the municipal securities acquired in the Sale Transaction results in the following conclusions:

- Barclays undervalued the municipal bonds it acquired from Lehman by at least \$152 million.
- Barclays applied an arbitrary and excessive twenty percent "liquidity discount" in determining the "exit values" of all but five municipal adjustable rate securities (hereafter "ARS"). The market for municipal bonds on September 19, 2008 did not support across-the-board haircuts of this magnitude. In fact, many comparable municipal securities were trading at or close to par.
- Barclays priced the remaining five ARS, one fixed rate municipal bond and one \$75 million floating rate bond at close to zero when, in fact, their market values were \$43,295,720, \$3,093,415 and \$61,336,500 respectively.

- Barclays' valuations are further flawed by their inappropriate use of September 22, 2008 as the valuation date.
- My valuations are based on observed market prices for comparable municipal bonds on September 19, 2008. As a result, they are better measures because they are based on actual traded prices.
- The Pfleiderer Report erred by accepting Barclays' flawed exit values for municipal bonds, and its opinions should be disregarded.

#### IV. **OPINION AND BASES THEREOF**<sup>2</sup>

##### **Opinion 1: Barclays' Exit Value Marks Are Incorrect And Represent A Lack Of Proper Analysis And Calculation**

###### A. COMPOSITION OF THE MUNICIPAL PORTFOLIO AND BARCLAYS' EXIT VALUE

9. Barclays acquired a municipal bond portfolio (hereafter the "Municipal Portfolio") of twenty-six securities with a principal value of \$382,353,446.<sup>3</sup> These municipal securities consisted of twenty adjustable rate bonds, one floating rate bond, three zero coupon bonds, and two fixed rate bonds. All of these bonds had maturities in excess of seven years and, based on the data I have reviewed, were investment grade.

---

<sup>2</sup> My analysis in this matter is ongoing and I reserve the right to supplement my analysis in response to any newly produced evidence or in rebuttal to any further opinions offered by Barclays' witnesses. I also reserve the right to do a more comprehensive CUSIP-by-CUSIP valuation, if necessary, of those securities I did not independently value for purposes of my report. In reaching my opinions, I have conducted my valuation of the securities based on closing prices on September 19, 2008 for settlement on that date. I have reviewed the available data regarding market conditions from the close of business in the United States on Friday, September 19, 2008 to the opening of business in the United States on Monday, September 22, 2008 and have concluded that any valuations which are based on closing prices on September 19, 2008 would not change materially.

<sup>3</sup> There are twenty-six municipal bonds that make up the "Municipal Portfolio". Nineteen are municipal bonds that were a part of the Sale Transaction on September 22, 2008 that had a dollar value difference greater than \$1,000,000 between the absolute value derived by BoNY and that of Barclays. Seven represent an analogous grouping of municipal bonds that are all priced at one tenth of a cent and are attached to the bottom of the "Rates" tab of BCI-EX-0099519 (Dep. Ex. 86B). This analogous group drew my special attention in addition to the nineteen that exceeded the \$1,000,000 threshold.

10. Barclays' value for the Municipal Portfolio (hereafter "Barclays' Exit Value") was \$191,220,214.<sup>4</sup>

11. Barclays applied a uniform twenty (20) percent liquidity discount to fifteen of the twenty ARS in the Municipal Portfolio, and valued the remaining five (5) ARS at close to zero (i.e., one tenth of a cent per \$100 face value). In addition, Barclays valued the Massachusetts Floating Rate Bond (hereafter the "floating rate bond")<sup>5</sup> at close to zero (i.e., \$750, or one tenth of a cent per \$100 face value). However, despite the magnitude of these mark downs, I have not seen a basis, documentation, or any justification for this pricing approach.

12. Given the number of municipal bonds traded on September 19, 2008, and after reviewing the related pricing data, I conclude that these haircuts were excessive and without proper justification, regardless of any perceived concerns regarding liquidity in the marketplace.

13. Market conditions on and around September 19, 2008 undoubtedly affected the liquidity of municipal securities. However, such concerns should have been reflected in their market prices. As a result, I believe that the securities' actual market prices on September 19, 2008 are the best indicators for valuing the Municipal Portfolio. In fact, many comparable municipal ARS were trading at or close to par, which does not support Barclays' twenty percent across-the-board haircut or a price of one tenth of a cent.

#### **B. INDEPENDENT VALUATION OF MUNICIPAL PORTFOLIO**

14. I have conducted an independent valuation of each of these twenty-six municipal bonds.

15. In my opinion, based on actual traded prices these bonds had a value of \$343,303,233 on September 19, 2008. Barclays' Exit Value for these bonds was \$191,220,214, or \$152,083,019 less than my independent valuation.<sup>6</sup> This \$152,083,019 difference represents the extent to which the Barclays' Exit Values underestimated the value of the Municipal Portfolio at the time of the Sale Transaction.

---

<sup>4</sup> The Barclays' Exit Price marks for the twenty-six CUSIPS comprising the Municipal Portfolio can be found in underlying spreadsheets rolling up to Barclays' Sale Transaction balance sheet. BCI-EX-0099519 (Dep. Ex. 86B).

<sup>5</sup> See Appendix III for a breakdown of my methodology.

<sup>6</sup>The results of my valuation are summarized in Table 1 and are attached to this Report as Exhibit II.

<b>Table 1</b>				
<b>Bond Type</b>	<b># of Bonds</b>	<b>Correct Valuation</b>	<b>Barclays' Exit Value</b>	<b>Valuation Difference</b>
<b>Municipal Bonds</b>	<b>26</b>	<b>\$ 343,303,233</b>	<b>\$191,220,214</b>	<b>\$152,083,019</b>

16. My prices, unlike Barclays', are based on observed market prices for comparable securities on September 19, 2008. My use of actual market prices to value municipal bonds explains most of the differences between my valuations and Barclays' Exit Values for these same securities.

17. Using data available from the Municipal Securities Rulemaking Board ("MSRB"), accessed by means of Bloomberg Research systems, I was able to observe prices on 12,416 municipal securities that traded on September 19, 2008. These securities had an average price of 99.05. Some 1,664 were adjustable rate municipal bonds, which traded at an average price of 99.89. Many of these bonds had characteristics that were very similar to ARS that were part of the Municipal Portfolio, and thus served as appropriate proxies for my valuations.

18. \$83,631,151 of the difference between my valuations and Barclays' can be attributed to my use of market prices that were at or close to par for the ARS. These market prices reflect the price of similar municipal ARS that traded on September 19, 2008. While there were concerns regarding liquidity, the large number of trades on that day clearly demonstrates that markets were functioning and that buyers and sellers could find opportunities to trade at market prices. Thus, market data provides the best and most accurate way to assess the value of the Municipal Portfolio under these market conditions.

19. Based on my analysis of these comparable securities, I conclude that the ARS in the Municipal Portfolio had a value based on actual traded prices of \$242,287,584 on September 19, 2008.

20. Another \$61,335,750 of the difference between my valuations and Barclays' can be attributed to my use of market data in my valuation of the floating rate bond. This floating rate bond had a notional amount of \$75,000,000, but was priced by Barclays at a level of one tenth of

a cent. However, based on widely accepted bond valuation methods, benchmark interest rate data, and market price data on comparable bonds that traded on September 19, 2008, I conclude that this bond is accurately priced at a level of 81.78, given market conditions at that time.

21. Barclays based its price for the floating rate note on the Bank of New York's (hereafter "BoNY")<sup>7</sup> valuation (\$750, or one tenth of a cent.) However, based on the production documents I have reviewed<sup>8</sup>, Barclays seems to have obtained—but rejected—a separate, third-party price of 71.56 made through Financial Times Interactive Data (hereafter "FTID") that would have led to a valuation of \$53,667,000, which is similar to my value of \$61,336,500. The only instances in the Municipal Portfolio in which Barclays accepted BoNY's valuations were for the seven municipal bonds (the floating rate bond, one fixed rate bond and five ARS) that were priced by BoNY at one tenth of a cent. This once more reveals a lack of proper analysis and calculation by Barclays, and is an example of Barclays' picking and choosing values subjectively.

22. Finally, \$7,166,118 of the difference between my valuations and Barclays' can be attributed to my use of market data to price the three zero coupon bonds and two fixed coupon bonds.

23. My valuation approach is fully consistent with industry practices. I began by determining the key characteristics of the bonds, including their maturity, credit rating (as of September 19, 2008), geographic location (defined by issuer and municipality), issue type (General Obligation vs. Revenue Bond) and revenue sources. I then used this data to identify bonds that could serve as "proxies" for these securities. Out of the 1,664 municipal ARS that traded on September 19, 2008 and had the requisite data, I selected one hundred fifty-four trades to use as proxies. In selecting these proxies, I attempted to find securities that matched the characteristics of the bonds of the Municipal Portfolio as closely as possible. The number of proxies that I used to value a given security ranged from a low of three to a high of twenty-four, with an average of eight and a half.

24. Once I had constructed a proxy bond universe for each bond in the Municipal Portfolio, I obtained the traded market prices of the underlying securities, and calculated the mean for each

---

<sup>7</sup>BoNY is the custodial bank of the Lehman Brothers assets held in repo. The BoNY prices reflect the value attributed to securities in the Municipal Portfolio by BoNY as of September 19, 2008.

<sup>8</sup> BCI-EX-0099519 (Dep. Ex. 86B).

set of proxy bonds. Once I had determined that the proxy price was reasonable, I multiplied the derived market price by the notional principal to obtain a value based on market traded prices for each adjustable rate bond of the Municipal Portfolio. My approach was similar for the floating rate note, fixed, and zero coupon bonds in that, as part of the bond valuation process, I referenced market traded prices, spreads, and yields of comparable bonds to help establish a reasonable market price. Once I had determined that the market price was reasonable, I multiplied the market price by the notional principal to obtain a value based on market prices for these types of bonds.

**Opinion 2: Professor Pfleiderer Was Incorrect In Accepting Barclays' Exit Price  
Marks**

25. The Pfleiderer Report did not independently value any of the bonds in the Municipal Portfolio. To the contrary, the Pfleiderer Report failed to provide any documentation or supporting analysis to justify the values in the portfolio except to accept the exit values provided by Barclays. These exit prices imposed excessive liquidity haircuts on all of the ARS in the portfolio, and erroneously valued seven of the securities at one tenth of a cent on September 19, 2008.

26. Reliance on actual market data explains most of the differences between my valuation and Barclays' Exit Values. Since my valuations were grounded in observable market data and Barclays' were not, the Pfleiderer Report's opinions on these securities should be disregarded.

Submitted by:



Joseph Schwaba  
March 15, 2010

# Appendix I

## Curriculum Vitae

JOSEPH SCHWABA

1305 Wellington Drive                          Residence: 412-220-7741  
Upper St. Clair, PA 15241                          Cell: 412-841-1925  
Email: [joeschwaba@yahoo.com](mailto:joeschwaba@yahoo.com)

## **SUMMARY**

Senior financial markets executive with leadership and management experience in all aspects of trading, risk management, and marketing of securities and derivative products. Extensive background in the successful management of capital markets and derivative businesses, with expertise in proprietary risk management, product development, and the successful execution of trading and marketing strategies.

## **PROFESSIONAL EXPERIENCE**

**FEDERAL HOME LOAN BANK OF PITTSBURGH – Pittsburgh, PA**      **2003 – 2009**

*A Government Sponsored Enterprise chartered by Congress to assure the flow of liquidity through its member financial institutions into the American housing market.*

## **Director, Corporate Risk Management**

Managed the Corporate Risk Return Department: responsible for all aspects of interest rate risk management, including modeling, measurement, and reporting of market risk, earnings risk, and risk-based capital adequacy to senior bank management.

- Significantly expanded the quality and quantity of staffing to achieve business objectives.

- Successfully oversaw the transition to a more complete, up-to-date asset liability modeling system that became the Bank’s primary system for interest rate risk management and risk-based capital analysis, management, and reporting.
    - Coordinated the approval of the new asset liability modeling system with the Bank’s regulator, the Federal Housing Finance Agency (FHFA).
    - Transition and subsequent system upgrades were done on time and within budget.
  - Department was recognized as increasingly integral to the analytical process involved in management decisions regarding valuation, earnings, and capital management through expanded and more comprehensive risk analysis.
  - Voting member of Bank’s Asset Liability Committee, and member of the Pricing and Market Risk Advisory sub-committees.

## SCHWABA & ASSOCIATES – Chicago, IL

2000 – 2003

## *Trading & Risk Management Advisory Services*

## **President**

Advised and trained clients on the use of derivative products to improve Treasury and Portfolio risk management. Client business activity included:

- Providing expert testimony in four selected NYSE and NASD Arbitration cases.
  - Trading advisor and manager in a Predictive Model joint venture with an established option/equity trading firm and an innovative software company, specializing in pattern recognition of publicly-traded stock prices.
  - Advising major equity option trading and market making firm on trading OTC derivatives related to market volatility.
  - Successfully locating a global financial institution to become equity investor and strategic business partner with this newly created firm specializing in origination and distribution of fixed income products to retail investors

ABN AMRO NORTH AMERICA – Chicago, IL

1996 – 1999

*Financial sector leader for large global bank enhancing its capital management and market presence in key strategic areas.*

**Senior Vice President**

Developed new markets supporting business direction of Company.

- Started and managed over-the-counter derivatives collateralization as a key strategic business initiative, including effects on risk-based capital. Represented Bank as one of ten charter members of the Chicago Mercantile Exchange (CME) Depository Trust Company.
- Developed structured investment products for Capital Markets and selected Commercial Banking Departments.

SCHWABA & ASSOCIATES – Chicago, IL

1991 – 1995

*Trading & Risk Management Advisory Services.*

**President**

Advised and trained clients on the use of derivative products to improve Treasury and Portfolio risk management. Client business activity included:

- Developing a strategy-based business framework for building profitable relationships with financial institutions. Participated in preliminary design of a global, multi-currency depository to collateralize OTC derivative transactions.
- Arranging and advising on prospective Sale Transaction related to over-the-counter (OTC) equity derivative market making.
- Advising a Chicago-based equity index/option market making firm regarding entry and participation in OTC equity derivatives market making.
- Training of personnel in Capital Markets financial products.

- Development of proprietary fixed income risk management software for senior management.
  - Development of a global derivatives products business plan for a major Asian bank.

**BANK OF AMERICA** (formerly Continental Bank) – Chicago, IL 1986 – 1990

*Provider of banking and financial services to individuals, small businesses, and commercial, corporate, and institutional clients.*

## **Managing Director**

Established Continental as one of the pre-eminent firms in marketing risk management services to US corporate customers.

- Grew business from zero revenues in 1987 to revenues of \$60mm in 1990.
  - Drove business profitability to a net operating income of \$30mm, and return on equity was in excess of 150%, one of Continental's most profitable businesses.
  - Managed the training and education of over 200 relationship managers and support personnel for marketing derivative products by partnering with the Bank's corporate banking department.
  - Managed Continental's Primary Dealer business involving the trading, underwriting, and distribution of US Treasury and US Government Agency securities.

## EDUCATION

*MBA (Finance) – Northwestern University, Chicago, IL*

*BA (Economics) – University of Notre Dame, South Bend, IN*

## MILITARY

## First Lieutenant – US Marine Corps

## Expert Report of Joseph Schwaba

Air Traffic and Air Defense Control – South Vietnam

**ADDENDUM**

***Professional Registrations***

- Series 3; registered as an Associated Person of the Commodity Futures Trading Commission (CFTC) (1978-2001)
- Series 7, registered as a General Securities Representative of the National Association of Securities Dealers (NASD) (1978-1991) (1996-2001)
- Series 63, registered as a Uniform Securities Agent under the Uniform Securities Act (1996-2001)
- Registered with the Commodity Futures Trading Commission (CFTC) as a Commodity Trading Advisor (1992-1996) and Introducing Broker (1992-1994)
- Series 8, registered as a Limited Principal, General Securities Sale Supervisor (NASD) (1985-1991)

***Professional Memberships***

- Member, International Monetary Market of the Chicago Mercantile Exchange (1983-1990), Interest Rate Options Committee (1985), Interest Rate Futures Committee (1986-1987)
- Associate Member, Chicago Board of Trade (1986-1990)
- Public Securities Association Primary Dealers Committee (1986-1988), Options Committee (1988)
- Member, New York Futures Exchange (1983-1985)

**Documents in the Record****Depositions**

Deponents	Date
Paul Pfleiderer	2/23/2010

**Deposition Exhibits**

Exhibit	Beginning Bates	Ending Bates
86B - Initial Inventory, Schedule A and B Assets	BCI-EX-00099519	BCI-EX-00099521
533A - Lehman Acquisition Assets Summary	BCI-EX-00295932	BCI-EX-00295933
25 - Clarification Letter		
24 - First Amendment to the Asset Purchase Agreement		
495 - Debtor's Motion for an Order, Pursuant to Fed. R. Civ. P. 60 and Fed. R. Bankr. P. 9024, Modifying the September 20, 2008 Sale Order and Granting Other Relief, September 15, 2009		
633A Report of Paul Pfleiderer, Volume 1, dated Jan. 8, 2010		
634A Report of Paul Pfleiderer, Volume 2, dated Jan. 8, 2010		

**Other Documents**

Description	Beginning Bates	Ending Bates
Barclays Capital Valuation Methodology	BCI-EX-(S)-00213991	BCI-EX-(S)-00213992
Review of Barclay's Capital Price Testing Methodology and Framework	PwC-BarCapWP- 00022935	
Debtors' Adversary Complaint, dated Nov. 16, 2009		
Motion of Official Committee of Unsecured Creditors of Lehman Brothers Holdings Inc., et al., Pursuant to 11 U.S.C. § 105(a), Fed. R. Civ. P. 60(b), and Fed. R. Bankr. P. 9024, for Relief from Order Under 11 U.S.C. §§ 105(a), 363, and 365 and Federal Rules of Bankruptcy Procedure 2002, 6004 and 6006, dated Sept. 15, 2009		
Official Committee of Unsecured Creditors' Adversary Complaint, dated Nov. 16, 2009		
The Trustee's Adversary Complaint, Nov. 16, 2009		
The Trustee's Motion for Relief Pursuant to the Sale Orders or, Alternatively, for Certain Limited Relief Under Rule 60(b), September 15, 2009		

**Documents that are Publicly Available**

Investinginbonds.com

**Other Documents Not Cited in the Record and Not Publicly Available**

Lehman Brothers Municipal Market Commentary, September 5, 2008  
Barclays Capital Municipal Market Commentary, October 3, 2008  
Bloomberg L.P. Data  
Investinginbonds.com.xlsx  
Schwab\_Market Inputs.pdf

## Appendix III

### Methodology

#### I. Adjustable Rate Securities

27. Regular auctions of ARS are designed to reset the coupon on the bonds to reflect current market conditions and the credit worthiness of the borrowers. A dealer conducts an auction to set the rate. Investors specify the lowest rate they will accept to hold the bonds until the next auction. Typically, the broker conducting the auction begins with the customers submitting the lowest yields and accepts their commitment to invest. The broker then accepts commitments from customers bidding successively higher rates until the amount of accepted bids equals the amount of bonds being auctioned. Usually, the accepted investors all earn the highest accepted rate at the auction.

28. Investors that held bonds at the time of the auction will retain their position if they are among the accepted bidders. Investors that held bonds at the time of the auction but were not among the accepted bidders will transfer their bonds to new owners and receive \$100 per \$100 notional plus previously accrued income. The auction process sets the rate consistent with a price at par (100 percent of face value).

29. The auction process makes the prices of many ARS close together and close to par. However, the rates assigned by the auction process are not equal across companies and over time. Instead, the rates reflect the specific credit risk of individual bonds and the market conditions.

30. Some auctions cannot set a coupon rate at a level where investors are willing to accept all the bonds being auctioned. This is called a failed auction. Failed ARS would trade below par and may be subject to restricted liquidity. There also is a maximum auction rate established for each bond.

31. Given the lack of uniformity for securities with coupon rates set by auction process in the ARS market, I used a market-price approach to value the ARS in the Municipal Portfolio. I first determined key characteristics of each bond in the portfolio, including auction history, on or around September 19, 2008. I then used the MSRB data base to determine proxy bonds reflecting key characteristics of each Municipal Portfolio security on September 19, 2008.

I then obtained traded market prices for each of these proxy bonds and calculated the mean for the prices of each set of proxy bonds. I then multiplied the derived market price by the notional principal to obtain a dollar market value for each ARS.

## **II. Zero Coupon Bonds**

32. The Municipal Portfolio includes three issues that pay no explicit coupon. Instead, the bonds are traded at a discount from par. The investor expects to receive the face value of the bonds and the difference between the face value and the market price reflects the interest the investor expects to earn over the life of the investment.

33. The positions were valued using market interest rates. Specifically, the rate reflects LIBOR (the London Interbank Offered Rate) plus a spread reflecting the credit conditions of the issuing municipality. The proper spread is determined by reviewing prices of comparable bonds that traded on September 19, 2008 to calibrate the pricing model used to price the zero coupon bonds.

## **III. Fixed Coupon Bonds**

34. Fixed coupon bonds are valued much like zero coupon bonds, except that the LIBOR curve provides inputs for pricing multiple cash flows (regular coupons and repayment of principal). As with the zero coupon bonds, the bonds are priced at a spread above the LIBOR rates reflecting the credit conditions of the issuer. The spread is determined by observing the prices of comparable issues and calibrating the model to accurately price the comparable bonds, and then apply the model to the fixed coupon bonds in the position.

## **IV. Floating Rate Notes**

35. The first step in valuing the floating rate bonds is to forecast all of the coupons up to maturity. The method used is commonly used in pricing floating rate notes and reflects the LIBOR curve. These projected coupons provide a basis for calculating cash flows. These projected cash flows and the principal payments are discounted at rates determined from the LIBOR curve and include a spread to reflect the credit conditions of the individual issuers. The

spread is determined by applying the same method to value comparable bonds to calibrate the floating rate pricing model.

<b>Asset Class</b>	<b>CUSIP</b>
<b>Municipal Bonds</b>	57582PJQ4
	254839J87
	373109BJ5
	196479ME6
	239427AG2
	764595AA2
	656178BE9
	798111AU4
	64986MUV5
	13033EKM4
	700404AA4
	917436CZ8
	517840D76
	649842AT8
	61213EFP4
	927781CQ5
	91754RLP0
	45200KZ35
	880459B35
	254839J87
	656178BE9
	841513LJ1
	574217JB2
	709223TC5
	7178182U1
	746189HG7
<b>Total Sum</b>	<b>26</b>

Asset Class	CUSIP	Chicago Partners Bid Value 09/19/08	Barclays Bid Value	Difference between Chicago Partners and Barclays Values (bid to bid)
<b>Municipal Bonds</b>				
	57582PJQ4	\$61,336,500.00	\$750.00	\$61,335,750.00
	254839J87	\$42,290,904.78	\$33,780,000.00	\$8,510,904.78
	373109BJ5	\$32,782,493.70	\$26,120,000.00	\$6,662,493.70
	196479ME6	\$23,480,000.00	\$18,784,000.00	\$4,696,000.00
	239427AG2	\$9,813,504.30	\$8,604,300.00	\$1,209,204.30
	764595AA2	\$10,700,400.00	\$9,100,000.00	\$1,600,400.00
	656178BE9	\$19,450,000.00	\$15,560,000.00	\$3,890,000.00
	798111AU4	\$12,216,611.10	\$11,683,200.00	\$533,411.10
	64986MUV5	\$14,125,000.00	\$141.25	\$14,124,858.75
	13033EKM4	\$12,350,000.00	\$9,880,000.00	\$2,470,000.00
	700404AA4	\$12,834,120.00	\$9,880,000.00	\$2,954,120.00
	917436CZ8	\$11,970,000.00	\$9,576,000.00	\$2,394,000.00
	517840D76	\$10,000,000.00	\$8,000,000.00	\$2,000,000.00
	649842AT8	\$8,397,144.00	\$6,720,000.00	\$1,677,144.00
	61213EFP4	\$7,237,051.50	\$5,800,000.00	\$1,437,051.50
	927781CQ5	\$6,524,955.20	\$5,216,000.00	\$1,308,955.20
	91754RLP0	\$6,400,000.00	\$5,120,000.00	\$1,280,000.00
	45200KZ35	\$5,100,000.00	\$4,080,000.00	\$1,020,000.00
	880459B35	\$3,855,187.50	\$3,175,500.00	\$679,687.50
	254839J87	\$125,195.10	\$100,000.00	\$25,195.10
	656178BE9	\$50,000.00	\$40,000.00	\$10,000.00
	841513LJ1	\$3,093,446.00	\$30.93	\$3,093,415.07
	574217JB2	\$5,200,000.00	\$52.00	\$5,199,948.00
	709223TC5	\$8,000,000.00	\$80.00	\$7,999,920.00
	7178182U1	\$7,971,520.00	\$80.00	\$7,971,440.00
	746189HG7	\$7,999,200.00	\$80.00	\$7,999,120.00
<b>Total Sum</b>	<b>26</b>	<b>\$343,303,233.18</b>	<b>\$191,220,214.18</b>	<b>\$152,083,019.00</b>